# **SIEMENS**

## **Camera Installation**

**Product: MAMMOMAT Novation DR (DROC)** 

Title: Specific Hardcopy Camera Information for

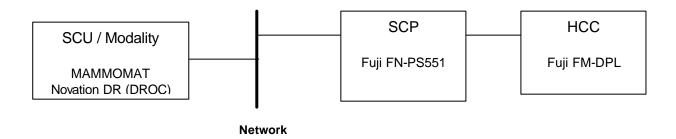
Fuji FM-DPL / FN-PS551

Affected systems: MAMMOMAT Novation DR with Image Processing, V1.0 and Hardcopy Cameras

Replaces: n.a.

## 1 General Information

### 1.1 Block Diagram



### 1.2 Available Film Size

Application			Film Type	Medium Type
14"x17"	Portrait	n.a.	n.a.	n.a.
	Landscape	n.a.		
14"x14"	Portrait	n.a.	n.a.	n.a.
	Landscape	n.a.		
11"x14"	Portrait	yes	DI-AL	Blue-based
	Landscape	yes		
10"x12"	Portrait	n.a.	n.a.	n.a.
	Landscape	n.a.		
8"x10"	Portrait	yes	DI-AL	Blue-based
	Landscape	yes		
others		n.a.	n.a.	n.a.

yes - Film size is available and released

no - Film size is available but not released

n.a. - Film size is not available

## 1.2.1 Supported Format

Supported page format is always 1x1

Siemens AG, Medical Solutions CS SD 24

### 1.3 Restrictions

For HCC-independent restrictions, see also the general restrictions in the MAMMOMAT Novation DR document.

Linear LUT(Dmax=3.5) is out of tolerance. Mammography Group SP WH will accept this software version; the mammography-specific Reference LUT is within tolerance.

## 2 Modality SW Configurations / Parameters

Refer to: MAMMOMAT Novation DR/CB-DOC/ Installation/Installations instructions

Refer to: MAMMOMAT Novation DR/CB-DOC/ Installation/Installations instructions.			
File name	Content	Remarks	
fujihighres.cfg	Configuration DROC Software Configuration Edit ./installed/raw/vdevfujihighres_001 Edit ./installed/raw/vdevfujihighres_001's configuration file: /linx_mp/resources/installed/raw/vdevfujihighres_001/fujihighres.c fg	This parameter can be changed within Netscape Service Login. Only importend parts of the file shown.	
	Group: Server factory object name = RMS://siemens06/installed/services/jss_server:PJF_OREF spooler name = DicomPrintSpooler priority = normal max retries = 20		
	Group: Output Device device type = FUJI High Resolution		
	Group: Print Job Description  device name = FMDPLHR  device address = 146.254.124.80:104  request annotation SOP class = false  request print job SOP class = false  print job poll period = 15  print job timeout = 300  printer poll period = 15  association timeout = 0  collate = false  custom lut file =  photometric interpretation = automatic		
	Group: Film Session  copies = 1  medium type = BLUE FILM  film destination = PROCESSOR  film session label = DROC film  memory allocation = 0  print priority = MED		
	Group: Film Box		

Siemens AG, Medical Solutions Print No.: SPB7-250.814.12.01.02 © Siemens AG, 2004 CS SD 24 Page 2 of 7

available image display formats = PORTRAIT\1,1 image display format = PORTRAIT\1,1 annotation display format id = FORMAT1 number of annotation boxes = 6annotation boxes per text line = 3 max annotation box text string size = 63 annotation string = max text line size = 189 number of image text lines = 5 image text position = left image text overlap = overwrite image text reorient = reorient 0 film size id = automatic film magnification type = CUBIC film smoothing type = NONE border density = BLACK empty image density = BLACK full pixel range = true min density = 20max density = 350 configuration info = CS100 trim = NO**Group: Image Box** polarity = NORMAL available image magnification types = REPLICATE BILINEAR **CUBIC** image magnification type = REPLICATE image smoothing type = NONE true size capable = true enable selective true size = true pixel size = 70pad = take image text line 1 = <Off> image text line 2 = <Off> image text line 3 = <Off> image text line 4 = <Off> image text line  $5 = \langle Off \rangle$ Group: PORTRAIT\1,1 width = 3337height = 4114

Note:	If Film Size ID is "automatic", the appropriate film size (Large Patient Matrix-
	size=large Filmsize) will be printed.
	After a change of Film Size ID in Netscape you have to press the Update button and
	restart the Sun!!!

Siemens AG, Medical Solutions Print No.: SPB7-250.814.12.01.02 © Siemens AG, 2004 CS SD 24 05.2004 Page 3 of 7

# 3 Hardcopy Camera, Configuration

## 3.1 Identification

Device Type:	DICOM Print Server(SCP)	Printer
Manufacturer / Device Name:	FUJI Photo Film / FN-PS 551	FUJI Photo Film / FM – DPL
HW Revision:	Dell – PC, Optiplex GX 1	Ser. – No. 9632026
SW Revision:	A 06	W01-02 (Main Unit)
Image Memory:	6 GB (128MB Main Memory)	48 MB
Hard disk:	6.4 GB	None
Number of Operating Panels:	1 PC keyboard	1 built-in keypad
No./Type of Input:	1 Ethernet Board,	FIX 90 A
No./Type of Output:	1 SCSI-PEI01A Board (FUJI-DMS Pro-	n.a.
	tokoll)	
Physical Network Interface:	100/10Base-T Ethernet, UTP/STP	None
Network Protocol:	TCP / IP	None
DICOM Conformance State-	FUJI Network Print Server FN-PS551,	None
ment:	May 2001, 4 <sup>th</sup> Edition	

# 3.2 SCP / Printer Settings

File name	Content	Remarks
None	FUJI Service Utility set-	Provided by FUJI
	ting:	
	Protocols: DICOM	Properties
		Network port no. = 104
		data transfer timeout = 600 sec.
		Print Server Application Entity = one to each printer
		Data receive if the printer is off-line = enable
	Printer: FMDPL	Properties
	Name:	AE Title of DICOM = FMDPL
		fine printing = FMDPLHR
	Interface:	interface = E-i/f
		pixel clock = 1,0 µsec/pixel
		version = type 1
		filmsize = 14x17
		film medium = blue
	Model:	model = FN-PS551
		manufacterer = FUJI PHOTO FILM CO, LTD

Siemens AG, Medical Solutions Print No.: SPB7-250.814.12.01.02 © Siemens AG, 2004 CS SD 24 05.2004 Page 4 of 7

Duomontino
Properties
Hostname: siemens06
IP adress = (from systemadministrator)
Protocol:DICOM
Application Entity Title = DIRECT_DIGXRAY
Attribute list error(0107H warning) = indicate
Attribute value out of range(0116H warning) = indicate
Image size larger than image box(B604H warning) =
indicate
N-Event-Report-RQ = disabled
Use Presentation LUT = No
Data transfer timeout = enabled
Use extension format = No
procedure = A-VR
smoothing type = SHARP
Adj. parameter = SHARP
edge detectionb = OFF
detection level = 600
sharpness = 130
character color = White
procedure = SAR
default LUT = 1 (linear)
Adj. parameter LUT = 1
rtable no. = 17
Max. density = 300
Min. density = 20
number of tuning points = 5
tuning point 1, density = 43, shift = 2,contrast = 100
tuning point 2, density = 80, shift = 3,contrast = 100
tuning point 3, density = 120, shift = 6,contrast = 100
tuning point 4, density = 175, shift = 8,contrast = 100
tuning point 5, density = 225, shift = 10,contrast = 100
fixed, FM-DPL

Siemens AG, Medical Solutions Print No.: SPB7-250.814.12.01.02 © Siemens AG, 2004 CS SD 24 05.2004 Page 5 of 7

output format1:	border density = 300
	polarity = normal(pos.)
	trim density = 300
	trim = off
	trim width = 1 pixel
	number of copies = 1
	film size = 14x17
	medium type = blue
	film orientation = portrait
	mirror = off(normal)
	overlay threshold density = 120
output format2:	a margin between image = 20 pixel
	Image Layout = concentration
Annotation: Print Server	upper left/center/right = (nothing selected)
	lower left/center/right = (nothing selected)
Logging:	network = (No)
	printer = (No)
	DICOM = normal
	output image to file = off
	Precedence = Input
Sorting:	sorting conditions = (nothing selected)

#### 3.3 **Error and Warning Messages**

n.a.

#### **Image Quality and Optical Density** 4

#### **Reference Film and LUT** 4.1

Released Film Type	DI-AL	BLUE FILM
--------------------	-------	-----------

05.2004

Refer to: MAMMOMAT Novation DR/CB-DOC/ Installation/Installations instructions.

#### 4.2 **Real Size Scaling**

n.a.

Siemens AG, Medical Solutions Print No.: SPB7-250.814.12.01.02 CS SD 24

### 5 Abbreviations

AE Title Application Entity Title

DCS DICOM Conformance Statement

DICOM Digital Imaging and Communication in Medicine

HW / SW Hardware / Software
HCC Hardcopy Camera
LUT Look Up Table

OEM Original Equipment Manufacturer SCP Service Class Provider

SCU Service Class User

TCP/IP Transfer Control Protocol / Internet Protocol

PLA Pacsnet Logical Address

## 6 Changes to Previous Version

n.a.

#### © Siemens AG 2003

The reproduction, transmission or use of this document or its contents is not permitted without express written authority. Offenders will be liable for damages. All rights, including rights created by patent grant or registration of a utility model or design, are reserved.

### **Document revision level**

The document corresponds to the version/revision level effective at the time of system delivery. Revisions to hardcopy documentation are not automatically distributed.

Please contact your local Siemens office to order current revision levels.

### **Disclaimer**

The installation and service of equipment described herein is to be performed by qualified personnel who are employed by Siemens or one of its affiliates or who are otherwise authorized by Siemens or one of its affiliates to provide such services.

Assemblers and other persons who are not employed by or otherwise directly affiliated with or authorized by Siemens or one of its affiliates are directed to contact one of the local offices of Siemens or one of its affiliates before attempting installation or service procedures.

Siemens AG, Medical Solutions Print No.: SPB7-250.814.12.01.02 © Siemens AG, 2004 CS SD 24 Page 7 of 7